

[54] **WET WIPING PRINthead CLEANING SYSTEM USING A NON-CONTACT TECHNIQUE FOR APPLYING A PRINthead TREATMENT FLUID**

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[58] Field of Search ..... **347/28, 33, 29, 347/22, 23; 15/256.05; 134/169 R**

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[57] **ABSTRACT**

A wet-wiping printhead cleaning system including a treatment fluid applicator placing treatment fluid on at least one of two elements involved in wiping, said two elements being a printhead orifice plate surface and a wiper, the system being so configured that treatment fluid is applied before wiping the printhead by projecting treatment fluid onto at least one element through the atmosphere, thereby avoiding direct contact between the applicator and said one element, the treatment fluid being placed so as to be available to assist in wiping a portion of the printhead orifice plate where the nozzle orifices are located to remove debris that may have accumulated, the treatment fluid lubricating the wiper so as to lengthen wiper service life and enhance wiping performance, as well as acting to render such accumulations more removable by wiping, the source of treatment fluid being uncontaminated by contact with either the printhead or the wiper.

**14 Claims, 21 Drawing Sheets**

